```
FILE 'REGISTRY' ENTERED AT 13:57:06 ON 11 OCT 2002

=> S URICASE/CN
L1             1 URICASE/CN

=> D

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2002 ACS
RN   9002-12-4  REGISTRY
CN   Oxidase, urate (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   E.C. 1.7.3.3
CN   Urate oxidase
CN   Urate: O2-oxidoreductase
CN   Uratoxidase
CN   Uric acid oxidase
CN     ***Uricase***
CN   Uricozyme
MF   Unspecified
CI   MAN
LC   STN Files:   ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS,
       BIOSIS, BIOTECHNO, CA, CAPLUS, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
       DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PHAR,
       PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
            1468 REFERENCES IN FILE CA (1962 TO DATE)
              67 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            1469 REFERENCES IN FILE CAPLUS (1962 TO DATE)


FILE 'CAPLUS' ENTERED AT 13:57:40 ON 11 OCT 2002

=> S L1 OR URICASE
          1469 L1
          1873 URICASE
            27 URICASES
          1877 URICASE
                 (URICASE OR URICASES)
L2        2385 L1 OR URICASE

=> S LYSINE;S LYS
         87302 LYSINE
          1739 LYSINES
L3       87831 LYSINE
                 (LYSINE OR LYSINES)


         23912 LYS
           370 LYSES
L4       24280 LYS
                 (LYS OR LYSES)

=> S MAMMAL OR MAMMALIAN
         24272 MAMMAL
         34564 MAMMALS
         51405 MAMMAL
                 (MAMMAL OR MAMMALS)
        163939 MAMMALIAN
           182 MAMMALIANS
        164070 MAMMALIAN
                 (MAMMALIAN OR MAMMALIANS)
L5      197410 MAMMAL OR MAMMALIAN

=> S L2 AND (L3,L4)
L6           31 L2 AND ((L3 OR L4))

=> S L6 AND L5
```

L7 1 L6 AND L5

=> S L6 NOT L7
L8 30 L6 NOT L7

=> D L7 CBIB ABS;D L8 1-30 CBIB ABS

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
2001:781078 Document No. 135:348850 Albumin fusion proteins with therapeutic proteins for improved shelf-life. Rosen, Craig A.; Haseltine, William A. (Human Genome Sciences, Inc., USA). PCT Int. Appl. WO 2001079443 A2 20011025, 374 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US11924 20010412. PRIORITY: US 2000-PV229358 20000412; US 2000-PV199384 20000425; US 2000-PV256931 20001221.
AB The present invention encompasses fusion proteins of albumin with various therapeutic proteins. Therapeutic proteins may be stabilized to extend the shelf-life, and/or to retain the therapeutic protein's activity for extended periods of time in soln., in vitro and/or in vivo, by genetically or chem. fusing or conjugating the therapeutic protein to albumin or a fragment or variant of albumin. Use of albumin fusion proteins may also reduce the need to formulate the protein solns. with large excesses of carrier proteins to prevent loss of therapeutic proteins due to factors such as binding to the container. Nucleic acid mols. encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors contg. these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Thus, plasmid vectors are constructed in which DNA encoding the desired therapeutic protein may be inserted for expression of the albumin fusion proteins in yeast (pPPC0005) and ***mammalian*** cells (pC4:HSA). Yeast-derived signal sequences from Saccharomyces cerevisiae invertase SUC2 gene, or the stanniocalcin or native human serum albumin signal peptides, are used for secretion in yeast or ***mammalian*** systems, resp. Thus, the fusion product of human growth hormone with residues 1-387 of human serum albumin retains essentially intact biol. activity after 5 wk of incubation in tissue culture media at 37.degree., whereas recombinant human growth hormone used as control lost its biol. activity in the first week. Although the potency of the albumin fusion proteins is slightly lower than the unfused counterparts in rapid bioassays, their biol. stability results in much higher biol. activity in the longer term in vitro assay or in vivo assays. Addnl., the present invention encompasses pharmaceutical compns. comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disorders or conditions using albumin fusion proteins of the invention.

L8 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2002 ACS
2002:317639 Document No. 137:5393 Chemical composition and enzymes of truffles collected from Sinai Desert, Egypt. Mohawed, S. M. (Botany Department, Faculty of Science, South Valley University, Egypt). Al-Azhar Journal of Microbiology, 55, 47-58 (English) 2002. CODEN: AJMIFI. ISSN: 1110-1601. Publisher: Al-Azhar University, Microbiology Dep., Faculty of Pharmacy.
AB Three fungal species of Terfezia were collected from Sinai Peninsula. Truffles were compared regarding their ascospores and asci. Fresh fruit bodies were screened for ***uricase*** , protease, .alpha.-amylase, proteinase K, lipase, and pectinase enzymes as well as their chem. compn. A new host plant Helianthemum sphaerocalyx was recorded for the first time. Results showed 24,20 and 18.5 % protein, 30, 38 and 29 % carbohydrates 6,3 and 2.5% fat, 3,5 and 7% crude fiber, 4, 5 and 6% ash for Terfezia boudieri, Terfezia claveryi and Terfezia leptoderma resp.

L8 ANSWER 2 OF 30 CAPLUS COPYRIGHT 2002 ACS
2002:116682 Document No. 136:228834 Chemiluminometric sensor for simultaneous determination of L-glutamate and L- ***lysine*** with immobilized oxidases in a flow injection system. Kiba, Nobutoshi; Miwa, Takao; Tachibana, Masaki; Tani, Kazue; Koizumi, Hitoshi (Department of Applied Chemistry and Biotechnology, Faculty of Engineering, Yamanashi University, Kofu, 400-8511, Japan). Analytical Chemistry, 74(6), 1269-1274 (English) 2002. CODEN: ANCHAM. ISSN: 0003-2700. Publisher: American Chemical Society.
AB A chemiluminometric flow-through sensor for simultaneous detn. of L-glutamate (Glu) and L- ***lysine*** (***Lys***) in a single sample has been developed. Immobilized ***uricase*** , immobilized peroxidase, support material, coimmobilized glutamate oxidase/peroxidase, support material, and coimmobilized ***lysine*** oxidase/peroxidase were packed sequentially in a transparent PTFE tube, and the tube was placed in front of a photomultiplier tube as a flow cell. A three-peak recording was obtained by one injection of the sample soln. The peak height of the first peak was due to the concns. of urate and other reductants in the sample; the immobilized ***uricase*** was used to decomp. urate, and the hydrogen peroxide produced was decompd. with a luminol-hydrogen peroxide reaction by immobilized peroxidase. The peak heights of the second and third peaks were free from the interferences from the reductants and were dependent only on the concns. of Glu and ***Lys*** , resp. Calibration graphs for Glu and ***Lys*** were linear at 40-1000 and 50-1200 nM, resp. The sampling rate was 11/h without carryover. The sensor was stable for two weeks. The sensor system was applied to the simultaneous detn. of Glu and ***Lys*** in serum.

L8 ANSWER 3 OF 30 CAPLUS COPYRIGHT 2002 ACS
2002:107165 Document No. 136:172754 Highly reactive branched polymer and proteins or peptides conjugated with the polymer. Park, Myung-Ok; Lee, Kang-Choon; Cho, Sung-hHe (S. Korea). PCT Int. Appl. WO 2002009766 A1 20020207, 47 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-KR1209 20010713. PRIORITY: KR 2000-44046 20000729.
AB The present invention relates to new biocompatible polymer derivs., and a protein-polymer or a peptide-polymer which is produced by conjugation of biol. active protein and peptide with the biocompatible polymer derivs. More particularly, the present invention relates to a highly reactive branched biocompatible polymer deriv. contg. a long linker between polymer derivs. and protein or peptide mols., which is minimized in decrease the biol. activity of proteins by conjugating the less no. of polymer derivs. to the active sites of proteins, improved in water soly., and protected from being degraded by protease. In hence, the highly reactive branched biocompatible polymer-proteins or peptides conjugates with long linker retain the biol. activity for a long period of time and improve a bioavailability of bioactive proteins and peptides. For example, activated PEG-interferon conjugates were prepd. by adding 3 mg of succinic N-hydroxysuccinimidyl di-PEG to 3 mg of interferon in 0.1 M phosphate buffer soln., pH 7.0 at ambient temp. The reaction was stopped with 0.1 M glycine and the excess reagents were using Centricon-30.

L8 ANSWER 4 OF 30 CAPLUS COPYRIGHT 2002 ACS
2001:759950 Document No. 136:115955 Temperature-Sensitive Phenotype of Chinese Hamster Ovary Cells Defective in PEX5 Gene. Ito, Ritsu; Huang, Yuan; Yao, Can; Shimozawa, Nobuyuki; Suzuki, Yasuyuki; Kondo, Naomi; Imanaka, Tsuneo; Usuda, Nobuteru; Ito, Masaki (Department of Biology, Saga Medical School, Saga, 849-8501, Japan). Biochemical and Biophysical Research Communications, 288(2), 321-327 (English) 2001. CODEN: BBRCA9. ISSN: 0006-291X. Publisher: Academic Press.
AB SK32 mutant cells, which were isolated as peroxisome-deficient Chinese hamster ovary (CHO) cells by an advantage of a visible peroxisome form of green fluorescent protein (GFP), were found to suffer from a functional loss of PEX5 gene encoding for PTS1R. The sequence anal. of cDNA

indicated that PEX5 gene encoded for the two isoforms composed of 603 amino acids (PTS1RS) and 640 amino acids (PTS1RL). The mutation changed glycine to arginine at amino acid position 343 of PTS1RL (corresponding to the position 306 of PTS1RS) in SK32 cells. The mutant cells exhibited a temp.-sensitive (TS) phenotype on the peroxisomal localizations of the recombinant GFP and urate oxidase appending a genuine peroxisome targeting signal 1 (PTS1), a tripeptide of Ser- ***Lys*** -Leu (SKL) at the C-terminus, but did not on that of catalase harboring a divergent PTS1, ***Lys*** -Ala-Asn-Leu (KANL) sequence. 3-Ketoacyl-CoA thiolase (hereafter referred to as thiolase), which harbors an extension sequence (PTS2) at the N-terminus, never appeared to be affected on the peroxisomal localization in the mutant cells. When thiolase was examd. on the mol. size in the mutant cells, the enzyme existed as the larger precursor form in the peroxisomes at 37.degree. and a considerable part (almost half) was converted to the mature size at 30.degree.. These results indicate that the amino acid substitution, Gly306Arg in PTS1RS and/or Gly343Arg in PTSRL, gives rise to TS phenotype on the peroxisomal translocation of PTS1 proteins and the maturation of PTS2 protein. (c) 2001 Academic Press.

L8 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2002 ACS

2001:31675 Document No. 134:83111 Methods and compositions for assaying analytes. Yuan, Chong-Sheng (General Atomics, USA). PCT Int. Appl. WO 2001002600 A2 20010111, 187 pp. DESIGNATED STATES: W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 2000-US18057 20000630. PRIORITY: US 1999-347878 19990706; US 1999-457205 19991206.

AB Compns. and methods for assaying analytes, preferably, small mol. analytes are provided. Assay methods employ, in place of antibodies or mols. that bind to target analytes or substrates, modified enzymes, called substrate trapping enzymes. These modified enzymes retain binding affinity or have enhanced binding affinity for a target substrate or analyte, but have attenuated catalytic activity with respect to that substrate or analyte. The modified enzymes are provided. In particular, mutant S-adenosylhomocysteine (SAH) hydrolases, substantially retaining binding affinity or having enhanced binding affinity for homocysteine or S-adenosylhomocysteine but having attenuated catalytic activity, are provided. Conjugates of the modified enzymes and a facilitating agent, such as agents that aid in purifn. or linkage to a solid support are also provided.

L8 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2002 ACS

2000:838607 Document No. 134:128770 Nitrogen metabolites and related enzymatic activities in the body fluids and tissues of the hydrothermal vent tubeworm Riftia pachyptila. De Cian, Marie-Cecile; Regnault, Michele; Lallier, Francois H. (Equipe Ecophysiologie, Observatoire Oceanologique de Roscoff (UPMC, CNRS, INSU), Station Biologique, Roscoff, F-29682, Fr.). Journal of Experimental Biology, 203(19), 2907-2920 (English) 2000. CODEN: JEBIAM. ISSN: 0022-0949. Publisher: Company of Biologists Ltd..

AB The distribution of nitrogen metab. end-products and the assocd. enzyme activities, free amino acids and purine base catabolites were investigated in all the body compartments (circulating fluids and tissues) of the hydrothermal vent tubeworm Riftia pachyptila to acquire a general overview of nitrogen metab. in this symbiotic organism. There were striking differences between the symbiont-contg. trophosome tissue and other host tissues. High concns. of ammonia, creatinine and, in particular, urate were found in all tissues, but they were present at consistently higher concns. in the trophosome, which also contained large amts. of urea. Uric acid crystals were present at the periphery of trophosome lobules. The urea cycle appears to be fully functional in this tissue, which also uses creatine phosphate for phosphagen storage, while arginine phosphate or a combination of both phosphagens occurs in other tissues. The amino acid patterns are dominated by sulfated compds. in all tissues except the trophosome, which has high levels of aspartate and glutamate. Although no definitive conclusions could be drawn regarding the nitrogen regime of

Riftia pachyptila, this in vitro study gives several indications for future research in this area.

L8 ANSWER 7 OF 30 CAPLUS COPYRIGHT 2002 ACS

1999:244542 Document No. 130:271867 Oxidative hair dye compositions containing oxidoreductase-type enzymes and basic amino acids. De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille (L'Oreal, Fr.). PCT Int. Appl. WO 9917726 A1 19990415, 31 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (French). CODEN: PIXXD2. APPLICATION: WO 1998-FR2025 19980922. PRIORITY: FR 1997-12359 19971003.

AB Cosmetic compn. for treating keratin fibers comprise in an appropriate support for keratin fibers: (a) at least an oxidoreductase-type enzyme with 2 electrons in the presence of at least a donor for said enzyme; and (b) at least a basic amino acid. Methods for treating keratin fibers, in particular the methods for dyeing, permanently setting or bleaching hair using said compn. are also disclosed. A hair dye compn. contained ***uricase*** (20 IU/mg) 1.5, uric acid 1.5, Oramix CG110 8.0, p-phenylenediamine 0.324, resorcin 0.33, hydroxyethyl cellulose 1.0, ethanol 20.0, arginine q.s. pH = 9.5, and water q.s. 100 g.

L8 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2002 ACS

1997:211309 Document No. 126:197141 Biosensors comprising enzymes immobilized in nets through reaction with polyaldehydes. Jilek, Milan (Biosenzor Medical Spol.S.R.O., Czech Rep.). Ger. DE 19545547 C1 19970313, 4 pp. (German). CODEN: GWXXAW. APPLICATION: DE 1995-19545547 19951206.

AB The invention includes an enzyme membrane in which enzymes are immobilized in layers, forming a net through the reaction of amino groups with polyaldehyde components. Such enzyme membranes are useful as biosensors.

L8 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2002 ACS

1996:551341 Document No. 125:204527 Multi-armed, monofunctional, and hydrolytically stable derivatives of poly(ethylene glycol) and related polymers for modification of surfaces and molecules. Harris, J. Milton; Veronese, Francesco Maria; Caliceti, Paolo; Schiavon, Oddone (Shearwater Polymers, Inc., USA). PCT Int. Appl. WO 9621469 A1 19960718, 98 pp. DESIGNATED STATES: W: AL, AM, AT, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT; RW: AT, BE, BF, BJ, CF, CG, CH, CI, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1996-US474 19960111. PRIORITY: US 1995-371065 19950110; US 1995-443383 19950517.

AB Multi-armed, monofunctional, and hydrolytically stable polymers are described having a moiety that can be activated for attachment to biol. active mols. such as proteins, polynucleotides, and lipids. A specific example is an mPEG disubstituted ***lysine*** used for modification of enzymes (RNase, catalase, trypsin, asparaginase, and ***uricase***).

L8 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2002 ACS

1995:946553 Document No. 124:3808 ***Uricase*** model reactions of polylysine-Cu(II) complexes. Tokimitsu, Yoshirou; Ise, Norio; Tanaka, Naoki; Kunugi, Shigeru (Dep. Polymer Sci. Eng., Kyoto Inst. Technol., Kyoto, 606, Japan). Bulletin of the Chemical Society of Japan, 68(11), 3277-82 (English) 1995. CODEN: BCSJA8. ISSN: 0009-2673. Publisher: Nippon Kagakkai.

AB The oxidn. of uric acid was catalyzed by Cu(II) complexes of poly-L-***lysine*** and poly-DL- ***lysine*** . The presence of polylysine as a 2nd ligand (in addn. to the 1st ligand, the substrate) showed an enhancement of the intrinsic catalytic activity of Cu(II) ions. Accounting for the apparent substrate inhibition phenomenon, due to the absorbance interference by the intermediate, the approx. Km values for the model systems were detd. to be .apprx.30-40 .mu.M, which was better than that of the free Cu(II) system (60-80 .mu.M) and was comparable or even better than the Km values for some enzymic reactions. From the CD

spectrum, the conformation of the polymer ligands is known to influence the catalytic activity. A preference of partially ordered structure was implied.

L8 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2002 ACS
1995:928347 Document No. 123:309468 Water-insoluble enzyme-containing laminates and their preparation by drying of aqueous polymer dispersion/emulsion containing dissolved enzyme. Pfeiffer, Dorothea; Klimes, Norbert; Szeponik, Jan; Nentwig, Juergen; Scheller, Frieder (BST Bio Sensor Technologie GmbH, Germany). Ger. DE 4410809 C1 19951005 (German). CODEN: GWXXAW. APPLICATION: DE 1994-4410809 19940323.
AB The title laminates and their prepn. are claimed. The laminates may be used in enzyme sensors and enzyme electrodes. Glucose oxidase was dissolved in an aq. acrylate emulsion. A dialysis membrane was coated with the resulting enzyme-contg. soln. then covered with a second dialysis membrane.

L8 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2002 ACS
1995:44718 Document No. 122:26624 Nucleotide sequences and expression of cDNA clones encoding ***uricase*** II in Canavalia lineata. Kim, Ho Bang; An, Chung Sun (Dep. Biol., Seoul Natl. Univ., Seoul, S. Korea). Sikmul Hakhoechi, 36(4), 415-23 (Korean) 1993. CODEN: KJBOAI. ISSN: 0583-421X.
AB Two full length cDNA clones encoding ***uricase*** II were isolated by plaque hybridization of a nodule of Canavalia lineata with a ***uricase*** II cDNA clone from soybean as a probe. Clone pcClNUO-01 was consisted of 1611 bp with one open reading frame (ORF) of 924 nucleotides (NT), while clone pcClNUO-02 was consisted of 1024 bp with one ORF of 903 NT. Nucleotide sequences for ORFs of the two clones showed 88.9% and 89.3% homol., resp., to that of soybean ***uricase*** II. Deduced amino acid sequence homologies to soybean ***uricase*** II were 84.1% and 85.4% resp. At 313 NT downstream of the termination codon in pcClNUO-01, putative signal (AATAAA) for poly(A) addn. was found, and 17 residues of poly(A) was found further downstream of 21 NT. The peroxisome-targeting signal (Ser- ***Lys*** -Leu) was also found at the carboxyl terminal of the deduced amino acid sequences for both ORFs. Deduced amino acid compn. of pcClNUO-01 and pcClNUO-02 shows that the ratios of basic amino acids (Arg, His, ***Lys***) and acidic amino acids (Asp, Glu) are 46 to 35 and 47 to 35, resp. This amino acid compn. indicates a basic nature of ***uricase*** II enzyme. According to Northern anal. of different organs, ***uricase*** II gene was expressed only in root nodule. Genomic hybridization also revealed that the ***uricase*** II gene may be present as a small multigene family on the genome of C. lineata.

L8 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2002 ACS
1994:552123 Document No. 121:152123 Urate oxidase is imported into peroxisomes recognizing the C-terminal SKL motif of proteins. Miura, Satoshi; Oda, Toshiaki; Funai, Tsuneyoshi; Ito, Masaki; Okada, Yoshiie; Ichiyama, Arata (School of Medicine, Yokohama City Univ., Yokohama, Japan). European Journal of Biochemistry, 223(1), 141-6 (English) 1994. CODEN: EJBCAI. ISSN: 0014-2956.
AB Rat liver urate oxidase synthesized from cDNA through coupled transcription and translation was incubated at 26 .degree.C for 60 min with purified peroxisomes from rat liver. Urate oxidase was efficiently imported into the peroxisomes, as detd. by resistance to externally added proteinase K. The amt. of imported urate oxidase increased with time and the import was temp. dependent. A synthetic peptide composed of the C-terminal 10 amino acid residues of acyl-CoA oxidase (the C-terminal tripeptide is Ser- ***Lys*** -Leu) inhibited the import of urate oxidase, whereas other peptides, in which the C-terminal Ser- ***Lys*** -Leu (SKL) sequence was deleted or mutated, were not effective. The mutant urate oxidase proteins in which the C-terminal Ser-Arg-Leu (SRL) sequence was deleted or mutated to Ser-Glu-Leu (SEL) were not imported into peroxisomes. With substitution of a ***lysine*** residue for arginine in the SRL ~~tripeptide at the C-terminus the import activity was~~ retained. These results show that urate oxidase is imported into peroxisomes via a common pathway with acyl-CoA oxidase, and that the C-terminal SRL sequence functions as a peroxisomal-targeting signal.

L8 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2002 ACS

1994:265355 Document No. 120:265355 A method of marking a liquid with particles and detecting that the liq. has been marked. Slater, James Howard; Minton, John Edward (UK). PCT Int. Appl. WO 9404918 A1 19940303, 40 pp. DESIGNATED STATES: W: AU, CA, US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1993-GB1822 19930826. PRIORITY: GB 1992-18131 19920826.

AB A method of marking a liq. (pharmaceutical, perfume, fertilizer, paint, org. solvent, etc.) and subsequently detecting that the liq. has been marked is disclosed. The method comprises: adding to the liq. an additive comprising a plurality of particles in an amt. .ltoreq.1 part wt. of particles per 106 parts wt. liq., the particles comprising signal means to aid their detection and not being visible in the liq. to the naked eye; sampling a portion of the liq. contg. said additive, and detecting the presence of particles in the liq., with the proviso that said signal means does not consist solely of a nucleic acid tag (no data). The signal means to aid the detection of the particles in the liq. may take a wide variety of forms, e.g. fluorescent substances or enzymes.

L8 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2002 ACS

1993:644375 Document No. 119:244375 Stabilization of labile analyte, especially enzyme, with biopolymer and condensing agent. Kwan, Shing Fai; Bravo-Leerabhandh, Marjorie; Hunt, Rebecca Jolene (Modrovich, Ivan E., USA). Eur. Pat. Appl. EP 562624 A2 19930929, 12 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1993-105044 19930326. PRIORITY: US 1992-858399 19920326.

AB Enzymes such as glycerol phosphate oxidase (I) are stabilized by the addn. of .gtoreq.1 biopolymers such as proteins and .gtoreq.1 condensing agents such as carbodiimide. The wt. ratio of the enzymes to the biopolymers is .ltoreq.100. Stabilization of I with bovine serum albumin, polysuccinylated ***lysine*** , and 1-ethyl-3-(3-dimethylaminopropyl)-carbodiimide was shown. I retained 70% original enzymic activity for 1 day at 41.degree., as compared to 0% activity without the addn. of the stabilizers.

L8 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2002 ACS

1993:444677 Document No. 119:44677 Porphyrin-titanium complexes for enzymic-photometric determination of physiologically active substances in clinical or food samples. Takamura, Kyoko; Matsubara, Cho; Kawamoto, Naoki (Tokyo Kasei Kogyo Kk, Japan). Jpn. Kokai Tokkyo Koho JP 05076395 A2 19930330 Heisei, 16 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-311263 19910918.

AB Physiol. active substances (glucose, galactose, pyruvic acid, etc.) in e.g. blood are quantitated by treating with a redox enzyme, treating H2O2 formed with e.g. oxo[5,10,15,20-tetra(4-pyridyl)-21H,23H-porphyrinate] titanium(IV), and photometrically measuring the reaction products. The method is highly selective and sensitive, and does not interference by other co-existing substances, e.g. glycine, ascorbic acid, NaCl, etc.

L8 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2002 ACS

1993:55013 Document No. 118:55013 Identification of an amino acid residue involved in the substrate-binding site of rat liver ***uricase*** by site-directed mutagenesis. Ito, Masaki; Kato, Seiya; Nakamura, Masamichi; Go, Mitiko; Takagi, Yasuyuki (Sch. Med., Fujita Health Univ., Toyoake, 470-11, Japan). Biochemical and Biophysical Research Communications, 187(1), 101-7 (English) 1992. CODEN: BBRCA9. ISSN: 0006-291X.

AB Computer anal. has shown that a conserved amino acid sequence (Leu 160 to ***Lys*** 164) of rat liver ***uricase*** is also present in other enzymes with purine substrates. The significance of the amino acids in this sequence was studied by site-directed mutagenesis. Replacement of ***Lys*** 164 by Glu or Ile resulted in loss of ***uricase*** activity and decrease in binding of the competitive inhibitor xanthine. The far-UV CD spectra of the mutant ***uricases*** were identical to that of the wild type protein, indicating that the replacement of ***Lys*** 164 by other amino acids did not result in serious modification of the conformation of ***uricase*** . These findings suggest that this amino acid is involved in the substrate-binding site of the enzyme.

L8 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2002 ACS

1992:463278 Document No. 117:63278 Cloning and expression in Escherichia

coli of the gene encoding Aspergillus flavus urate oxidase. Legoux, Richard; Delpech, Bruno; Dumont, Xavier; Guillemot, Jean Claude; Ramond, Philippe; Shire, David; Caput, Daniel; Ferrara, Pascual; Loison, Gerard (Safofi Elf BioRech., Labege, 31676, Fr.). Journal of Biological Chemistry, 267(12), 8565-70 (English) 1992. CODEN: JBCHA3. ISSN: 0021-9258.

AB Amino acid sequencing of peptides obtained after proteolytic hydrolysis of A. flavus urate oxidase (***uricase***) permitted the design of olgiodeoxynucleotide probes that were used to obtain 1.2- and 5-kilobase pair DNA fragments from A. flavus cDNA and genomic libraries, resp. The cDNA fragment contained the entire coding region for ***uricase*** , and comparison with the genomic fragment revealed the presence of 2 short introns in the coding region of the gene. A. flavus ***uricase*** has .apprxeq.40% overall identity with ***uricases*** from higher organisms but with many conserved amino acids. Hitherto highly conserved consensus patterns found in other ***uricases*** were modified in the A. flavus enzyme, notably the sequence Val-Leu- ***Lys*** -Thr-Thr-Gn-Ser near position 150, which in the filamentous fungus is uniquely modified to Val-Leu- ***Lys*** -Ser-Thr-Asn-Ser. Silent mutations were introduced by cassette mutagenesis near the 5'-extremity of the coding sequence in order to conform with E. coli codon usage, and the ***uricase*** was expressed in the E. coli cytoplasm in a completely sol., biol. active form.

L8 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2002 ACS

1992:250990 Document No. 116:250990 Structural analysis of the rat ***uricase*** gene and evidence that ***lysine*** 164 is involved in the substrate-binding site of the enzyme. Ito, Masaki; Nakamura, Masamichi; Kato, Seiya; Ogawa, Hisamitsu; Takagi, Yasuyuki (Lab. Biol., Saga Med. Sch., Saga, 849, Japan). Advances in Experimental Medicine and Biology, 309A(Purine Pyrimidine Metab. Man 7, Pt. A), 377-81 (English) 1991. CODEN: AEMBAP. ISSN: 0065-2598.

AB In order to evaluate the amino acid sequences confering enzyme function, amino acid sequences were aligned between rat, fly and soybean ***uricases*** and three conserved sequences (amino acid positions of rat ***uricase*** 62-75, 156-168 and 231-239) were found. A computer search showed that the sequence of rat ***uricase*** , Leu 160 to ***Lys*** 164 is also conserved in hypoxanthine-guanine phosphoribosyltransferase (HPRT, EC.2.4.2.8) of human and xanthine-guanine phosphoribosyltransferase (XGPRT, EC.2.4.2.22) of Escherichia coli. The amino acids in the conserved sequence (Leu 160 to ***Lys*** 164) were altered by olgionucleotide-directed mutagenesis. The substitution of ***Lys*** 164 to Glu (K164E) or ***Lys*** 164 to ILe (K1641) resulted in decreased enzyme activity, suggesting that ***Lys*** 164 is involved in a site crucial to the catalytic reaction.

L8 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2002 ACS

1990:607869 Document No. 113:207869 Method and standard solution for the determination of fructosamine in body fluids. Vogt, Bernd; Lessmann, Hans Dieter; Klein, Christian; Treiber, Wolfgang (Boehringer Mannheim G.m.b.H., Fed. Rep. Ger.). Eur. Pat. Appl. EP 351790 A2 19900124, 7 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (German). CODEN: EPXXDW. APPLICATION: EP 1989-113171 19890718. PRIORITY: DE 1988-3824562 19880719.

AB Fructosamine (in glycosylated proteins) is detd. in body fluids, for monitoring of diabetes, by reaction with the colorless oxidized form of a dye (e.g. a tetrazolium salt) and photometric detn. of the colored reduced dye (e.g. formazan) formed. The std. for the detn. is a stable, noninfectious glycosylated peptide or protein contg. .gtoreq.25% ***lysine*** and/or ornithine units, e.g. glycosylated polylysine, polyornithine, or a ***lysine*** -ornithine copolymer. Thus, poly-L- ***lysine*** 500 mg, D(+)-glucose 1200 mg, and AcOH 50 mL were mixed, 50 mL pyridine was added dropwise, the soln. was stirred at room temp. for 8 days, 300 mL water was added, and the soln. was repeatedly evapd. to a small vol. and treated with HCL. The degree of glycosylation of ***lysine*** side chains of the product was 30%. The stability of this product was 100% after 2 wk storage at 35.degree. in 0.1M HCl.

L8 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2002 ACS

1990:92834 Document No. 112:92834 Cloning of rabbit ***uricase*** cDNA reveals a conserved carboxy-terminal tripeptide in three species.

Motojima, Kiyoto; Goto, Sataro (Fac. Pharm. Sci., Toho Univ., Funabashi, 274, Japan). Biochim. Biophys. Acta, 1008(1), 116-18 (English) 1989. CODEN: BBACAQ. ISSN: 0006-3002.

AB Some cDNA clones encoding ***uricase*** have been isolated from a rabbit liver cDNA library. The nucleotide sequences of the cDNAs have been detd. and those of the rat ***uricase*** cDNA have been revised. In all 3 ***uricases*** , the carboxy-terminal tripeptides are Ser-Arg/ ***Lys*** -Leu sequences, which have recently been suggested as an essential element of peroxisomal targeting signals for many but not all peroxisomal proteins.

L8 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2002 ACS

1982:48237 Document No. 96:48237 Modification of amino groups in Candida utilis ***uricase*** with naphthoquinone disulfonic acid in relation to the enzymic activity. Yoshida, Kazuo; Nishimura, Hiroyuki; Takahashi, Katsunobu; Matsushima, Ayako; Inada, Yuji (Lab. Biol. Chem., Tokyo Inst. Technol., Tokyo, 152, Japan). FEBS Lett., 134(1), 50-2 (English) 1981. CODEN: FEBLAL. ISSN: 0014-5793.

AB ***Uricase*** (I) of C. utilis, a tetrameric enzyme with identical subunits, contains 2 essential NH2 groups as demonstrated by chem. modification of the enzyme with .beta.-naphthoquinone-4,6-disulfonic acid (II) after oxidn. of cysteine residues with o-iodosobenzoate and alk. denaturation in the presence and absence of the substrate analog xanthine. Of the 96 NH2 groups of I, .apprx.65 were modified by II in the oxidized enzyme and the remaining 31 were modified following denaturation. Modification of denatured I was accompanied by a dramatic loss in enzymic activity. Protection of I from II-induced inactivation in the presence of xanthine indicated that 2 NH2 groups are located at the active site of the enzyme subunit and are closely assocd. with I activity. Only the .epsilon.-NH2 groups of ***lysine*** residues were modified by II and the active site NH2 group modification was specific for II.

L8 ANSWER 23 OF 30 CAPLUS COPYRIGHT 2002 ACS

1980:545473 Document No. 93:145473 Preparation and properties of various enzymes covalently immobilized on polymethylglutamate. Minamoto, yoshiki; Yugai, Yasumi (Cent. Res. Lab., Ajinomoto Co., Ltd., Kawasaki, 210, Japan). Chem. Pharm. Bull., 28(7), 2052-8 (English) 1980. CODEN: CPBTAL. ISSN: 0009-2363.

AB Polymethylglutamate (PMG), a synthetic polypeptide, was used as a carrier to immobilize glucose oxidase (EC 1.1.3.4), ***uricase*** (EC 1.7.3.3), peroxidase (EC 1.11.1.7), trypsin (EC 3.4.21.4), chymotrypsin (EC 3.4.21.1), urease (EC 3.5.1.5), and aminoacylase (EC 3.5.1.14) by the NH3 method. The enzymes could be immobilized covalently on PMG coated on glass beads. The retained activities of all the immobilized enzymes were excellent (>90%). The amt. of enzyme immobilized on the polymer varied markedly depending on the kind of enzyme (trypsin 30 mg, chymotrypsin 27 mg, urease 5.8 mg, ***uricase*** 5.6 mg, aminoacylase 2.3 mg, glucose oxidase 1.8 mg, and peroxidase 2.3 mg/100 mg PMG). The amt. of bound enzyme was detd. primarily by the mol. wt. and secondarily by the content of ***lysine*** residues in the enzyme. The heat stabilities of the resulting immobilized enzymes were markedly improved, whereas the optimal pH and Km values were almost unchanged. The enzymes immobilized on PMG showed improved stability because of both the increased hydrophilicity of the polymer and the multipoint binding mode, including covalent and ionic bonding.

L8 ANSWER 24 OF 30 CAPLUS COPYRIGHT 2002 ACS

1977:102474 Document No. 86:102474 Studies on the ***uricase*** enzyme of groundnut. Saini, B. S.; Paul, Brij; Thapar, V. K.; Singh, Rattan (Dep. Biochem., Punjab Agric. Univ., Ludhiana, India). Plant Biochem. J., 3(2), 137-43 (English) 1976. CODEN: PBJODQ.

AB The properties of ***uricase*** in peanut were studied. The Km was 9.25 .times. 10-5M and the energy of activaion was 8.46 kcal/mole. Histidine, ***lysine*** , and SH groups are probably present on the active site. Hg2+ and Ag+ inhibited the enzyme, whereas Mn2+ acted as an activator.

L8 ANSWER 25 OF 30 CAPLUS COPYRIGHT 2002 ACS

1974:552582 Document No. 81:152582 Polysaccharide cyclic carbamate containing compounds. Keys, Melvin H.; Semersky, Frank E. (Owens-Illinois, Inc.). U.S. US 3833555 19740903, 3 pp. (English).

CODEN: USXXAM. APPLICATION: US 1972-296634 19721011.

AB Polysaccharides reacted with BrCN followed by condensation with amino acids or enzymes in 0.1M Na borate buffer and then cyclization with COCl2 to give N-carboxyanhydride derivs. Thus, agarose was treated with BrCN at pH 10.5, condensed with L- ***lysine*** , and cyclized with COCl2 5 hr at 35-40.degree. to give 0.32 mmoles ***lysine*** substitution per g condensation product. Similarly, 1.1 mg ribonuclease were insolubilized per g cyclized agarose product.

L8 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2002 ACS

1974:2485 Document No. 80:2485 Nutritive value of proteins from maize hybrids genetically enriched in ***lysine*** . Gontea, I.; Sutescu, Paraschiva; Dinu, Ileana; Boghianu, L.; Marin-Stanciu, V. (Sect. Aliment., Inst. Ig. Sanatate Publica, Bucharest, Rom.). Igiena, 22(1), 1-10 (Romanian) 1973. CODEN: IGIBA5.

AB The protein efficiency ratios of the opaque mutants 7/70, 10/70, 12/70, and 17/70 were 2.6, 2.4, 2.2, and 2.4 vs. 1.5 for a std. hybrid 301 and 2.45 for casein. The protein level in the test rations was .apprx.8.3%. Activities of xanthine oxidase, succinic dehydrogenase, aspartate aminotransferase, and ***uricase*** in the liver of rats fed the opaque hybrids were generally higher than in those fed the std. hybrid and lower than in those fed casein, but the reverse was true with alk. phosphatase.

L8 ANSWER 27 OF 30 CAPLUS COPYRIGHT 2002 ACS

1969:401024 Document No. 71:1024 Relation between transformation frequency and gene function in the histidine degrading enzymes of Bacillus subtilis. Cooper, Geoffrey M.; Fox, Maurice S. (Massachusetts Inst. of Technol., Cambridge, Mass., USA). Biochem. Biophys. Res. Commun., 34(6), 777-83 (English) 1969. CODEN: BBRCA9.

AB The relation between genetic recombination and gene function was detd. by DNA-mediated transformation of B. subtilis mutants which lost the ability to synthesize functional histidase (I). Recipient bacteria were transformed with DNA from a I-pos., sulfanilamide-resistant strain both in the presence and absence of histidine (II). The relative frequency of I transformants increased in the presence of II with strain SB25-113, but was independent of the presence of valine, proline, ***lysine*** , and serine. Thus, the stimulation of I transformation by II was specific for II. Strain SB25-113 was transformed both in the presence and absence of II with DNA isolated from an erythromycin-resistant, I-pos. strain. The relative transformation frequency increased in the presence of II in a presumably pleiotropic neg. mutant in which the structural genes for neither I nor for ***uricase*** appeared to function. Thus, no simple relation appeared between gene function and genetic recombination.

L8 ANSWER 28 OF 30 CAPLUS COPYRIGHT 2002 ACS

1964:405513 Document No. 61:5513 Original Reference No. 61:907e-f Inhibition of several enzymes by folic acid, aminopterin, and amethopterin. Vogel, W. H.; Snyder, R.; Schulman, M. P. (Univ. of Illinois Coll. of Med., Chicago). Biochim. Biophys. Acta, 85(1), 164-6 (English) 1964.

AB Enzymes with different cofactor requirements were assayed in the presence of folic acid, aminopterin, or amethopterin. It was found that these compds. inhibited catalase, carboxypeptidase B, and ***uricase*** , but did not inhibit hexokinase, carboxypeptidase A, D-amino acid oxidase, or ***lysine*** decarboxylase. The inhibition was not related to a specific coenzyme structure, but was similar for all the inhibited enzymes. It was not competitive; rather a complex reaction of several mols. of inhibitor with the enzyme at some site other than the active site was indicated. Inhibitions by folic acid and analogs were similar.

L8 ANSWER 29 OF 30 CAPLUS COPYRIGHT 2002 ACS

1962:438343 Document No. 57:38343 Original Reference No. 57:7706b-e Protein metabolism. III. Effects of dietary methionine, cystine, ***lysine*** , or choline in excess on the activities of certain enzymes in rat liver. Kung, Y. T.; Shen, C. W. Sheng Hua Hsueh Pao, 1, 128-40 From: Biol. Abstr. 36, Abstr. No. 10066(1961). (Unavailable) 1958.

AB cf. CA 54, 19898a. Changes in body wt. and liver enzyme activity were det. when rats were provided a 12% casein diet supplemented with either 3.2% L-cystine, 4% L- ***lysine*** -HCl, or 4.2% choline chloride. The enzymes detd. were leucine aminopeptidase, glutamic dehydrogenase,

glutamic-alanine transaminase, xanthine oxidase, and ***uricase*** . Protein diets contg. excessive amts. of cystine, ***lysine*** , or choline had no depressant effect on the appetite. In all cases body wt., as well as liver wt., increased. Liver-protein N was also elevated. No particular influence was observed on the activities of enzymes which, in general, changed with liverprotein N. Excessive cystine, however, induced a high degree of fat formation and produced a significant rise in the activities of glutamic-alanine transaminase and xanthine oxidase. Contrarily, the diet contg. methionine in excess depressed the appetite, thus restricting the food intake, but brought about increases in enzyme activities in the liver. The toxicity of excessive dietary methionine is a property of the intact mol. rather than that of its methyl group or its S moiety. The possible mechanism by which excessive methionine exerts its toxic effects was discussed in connection with suggestions made by other workers.

L8 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2002 ACS

1961:101104 Document No. 55:101104 Original Reference No. 55:19041d-f
Nitrogen metabolism in Paramecium aurelia. Soldo, A. T.; van Wagtendonk, W. J. (Indiana Univ., Bloomington). J. Protozool., 8, 41-55 (Unavailable) 1961.

AB CCl3COOH-sol. fractions contain adenine, adenosine, guanine, guanosine, hypoxanthine, aspartic acid, glutamic acid, histidine, ***lysine*** , proline, and phenylalanine, but not pyrimidines and xanthine or their ribosides or ribotides. Growing, as well as resting cells, release NH3 into the medium. Pyrimidine N is excreted as dihydrouracil. Homogenates and cell-free prepns. contain nucleotidases, nucleoside hydrolases, and cytidine deaminase but not urease, ***uricase*** , adenase, guanase, xanthine oxidase, adenosine deaminase, and 5'-adenylic acid deaminase. Purine and pyrimidine incorporation into nucleic acid was also studied.

	L #	Hits	Search Text	DBs
1	L1	237797	monomethoxypolyethylene glycol	USPAT ; US-PG PUB
2	L2	237797	monomethoxypolyethylene glycol	USPAT ; US-PG PUB
3	L3	401662	polyethylene glycol	USPAT ; US-PG PUB
4	L4	39685	lysine	USPAT ; US-PG PUB
5	L5	940	uricase	USPAT ; US-PG PUB
6	L6	19982	L1 AND L4	USPAT ; US-PG PUB
7	L7	21562	L3 AND L4	USPAT ; US-PG PUB
8	L8	212	(L6 OR L7) AND L5	USPAT ; US-PG PUB
9	L9	363369	ACTIVITY	USPAT ; US-PG PUB
10	L10	209	L9 AND L8	USPAT ; US-PG PUB
11	L11	1713	L1 SAME L4	USPAT ; US-PG PUB
12	L12	1882	L3 SAME L4	USPAT ; US-PG PUB
13	L13	112	(L11 OR L12) AND L5	USPAT ; US-PG PUB